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EXAMINER

NGUYEN, MERILYN P

ART UNIT PAPER NUMBER

2163

DATE MAILED: 01/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/013,091

Applicant(s)

ZARGHAM ET AL.

Examiner

Merilyn P. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☒ Claim(s) 1-22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: Detailed Action.

DETAILED ACTION

1. In response to the communication dated 10/12/2005, claims 1-22 are pending in this office action.
2. This application claims priority from Provisional Application number 60285640 filed on 04/19/2001.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1, 11, 15 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, 11, 15 and 16, these claims are incomplete because there is no steps to arrive the method for enriching publish and subscribe in an enterprise running as a zero latency enterprise introduced at the preamble. The claims recite, "subscribing the enriched messages", however, the claims do not describe the method of how to subscribe the enriched messages. Also, the claims recite the step of "publishing" but nowhere else in the claim describe how to enrich publishing. These claims are incomplete claims.

Claim Rejections - 35 USC § 102

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 5-8, 10-13, 15-16, and 19-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Stewart (US 2002/0013759).

Regarding claims 1, 11 and 15, Stewart discloses a method, a system, and a computer readable medium embodying computer program code configured to cause a computer to perform steps for providing enriched publish and subscribe in an enterprise (See Figs 12-13, 21-23 and 26, and page 15, paragraphs [0233-0234], and pages 18-19, paragraphs [0303-0305]) running as a zero latency enterprise (ZLE) (See page 19, paragraph [0312]), the enterprise experiencing a plurality of events occurring in association with business transactions conducted at a plurality of sites across the enterprise (See page 13, paragraph [0196] and page 19, paragraph [0305]), the method comprising:

initiating, in real time, a process responsive to an event (See page 10, paragraph [0124], event corresponding to collaborations of trading partners for discussion or conversation related to business transactions), the process including

- publishing to a central repository one or more messages prompted by that event containing information from that event (See page 10, paragraph [0124], lines 6-7), respective information from the plurality of events

being aggregated in the central repository (See page 13, paragraph [0201], [0139], [0150]) where the aggregated information can, in real-time, be accessible and available for extraction and analysis from across the enterprise, [0227], lines 11-14, and [0279]),

- updating the aggregated information with information from the published messages (See [0280]),
- enriching new messages with information from that event and/or corresponding information extracted from the central repository (See [0227-0228]), and
- subscribing to the enriched new messages (See [0233-0234]).

Regarding claims 2 and 12, Stewart discloses wherein the central repository operates as an information broker between applications such that applications publish messages to the central repository and subscribe to messages from the central, rather than exchange request-response messages directly with each other (See [0214-0216] and [0223]).

Regarding claims 3 and 21, Stewart discloses wherein for a particular number (N) of applications, a combined number of the published and subscribed messages can be reduced from twice that particular number (2N) to a total number of 4 or 5 messages (See [0083, 0227, 0228]).

Regarding claims 5 and 20, Stewart discloses predefining a schema for each of the applications, the schema identifying which of the plurality of events and types of data changes its

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respective application is interested in, the schema further identifying any information its respective application needs for performing tasks related to such events (See page 11, paragraphs [0137-0138], and page 18, paragraph [0282] to page 19, paragraph [0305]); and storing each schema in the central repository for later use in enriching the new messages (See page 11, paragraph [0137], lines 6-12).

Regarding claim 6, Stewart discloses wherein the applications cause the updating of aggregated information at the central repository upon a change of information in their environment (See page 14, paragraph [0219-0220]).

Regarding claim 7, Stewart discloses wherein the published messages and subscribed messages are formatted in XML (See [0233-0234]).

Regarding claims 8 and 13, Stewart discloses wherein the central repository is based on a database which can be updated with information from new events while being queried and which can send the enriched messages to multiple subscribers, thereby leveraging an innate parallelism, scalability and reliability of the database (See paragraphs [0137-0139]).

Regarding claim 10, Stewart discloses wherein the enriched new messages to which an application subscribes can include extracted information that was previously published to the central repository by other one or more applications (See page 15, paragraphs [0227-0228]).

Regarding claim 16, Stewart disclose a system for enriched publish and subscribe operations associated with business transactions conducted by an enterprise running as a zero latency enterprise (ZLE), the system being implemented in a ZLE framework (See Figs 1-3) and comprising:

- one or more applications via which the business transactions are conducted (See 106, 108, 110, 112, 114, Fig. 1); and
- an operational data store (ODS) (Hub 132, Fig. 3), the ODS being operatively communicative with the one or more applications such that the applications are capable to publish messages to and subscribe to messages from the ODS (See page 7, paragraph [0089] to page 8, paragraph [0113]), the ODS being configured
 - to operate as a dynamic central repository that consolidates information from across the enterprise (See page 12, paragraph [0150]) and supports business transactional access to real time information from any of the one or more applications (See page 13, paragraphs [0201], [0206]),
 - to know what particular information any one of the applications needs in order to accomplish its task (See page 13, paragraph [0198]), the particular information enriching messages to which the applications subscribe (See page 13, paragraph [0206]), and
 - to update the consolidated information with information from messages published by the applications [See page 13, paragraph [0202], and page 18, paragraph [0279, 0280]].

Regarding claim 19, Stewart discloses wherein the particular information for enriching messages subscribed to by an application can be information previously published by another application (See [0226-0227]).

Regarding claim 22, Stewart discloses further discloses an inference-based rules engine that finds an appropriate business rule, regardless of the complexity of rules or the size of any rules set, the inference-based rules engine facilitating a rules service that integrates the rules and policies of the enterprise in the ODS (See page 6, paragraph [0073] and page 9, paragraphs [0117] and [0120]); and a process-flow engine that manages a flow of the business transactions, processes, and messages between the applications integrated via the ZLE framework (Work Flow Server 104, Fig. 1, and [0081] and [0139]).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stewart (US 2002/0013759), in view of Schmidt (US 2002/0026630).

Regarding claim 4, Stewart discloses all the claimed subject matter as set forth above in claim 1. However, Stewart is silent as to wherein the central repository provides a coherent view, in real time, of the aggregated information from across the enterprise, the process being founded on the coherent view of the aggregated information. On the other hand, Schmidt teaches an integrated view of the aggregated information from across the enterprise (See page 9, paragraph [0253], [0288], Schmidt et al.). It would have been obvious to one having ordinary skill in the art at the time of the invention was made to incorporate a coherent view of Schmidt to the aggregated information of Stewart. The motivation would have been providing browsing for desired information.

Regarding claim 18, Stewart/Schmidt discloses wherein the consolidated information can, in real-time, be accessible and available for extraction and analysis from across the enterprise (See [0150], [0227], lines 11-14, and [0279], Stewart et al.), the ODS providing for a coherent view of the consolidated information, in real time, from across the enterprise as addressed above in claim 4.

6. Claims 9, 14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stewart (US 2002/0013759), in view of Chandra (US 6,058,389).

Regarding claims 9 and 14, Stewart discloses all the claimed subject matter as set forth above. However, Stewart is silent as to wherein the central repository includes relational database management functionality that caches and queues the published and subscribed messages. On the other hand, Chandra teaches relational database management functionality that

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caches and queues the published and subscribed messages (See col. 4, lines 6-16, and col. 35, lines 15-67, Chandra et al.). It would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a relational database management functionality that caches and queues the published and subscribed messages as suggested by Chandra. The motivation would have been to store published and subscribed messages in a predetermined order so that messages would be easily managed, queried, or handled in later time.

Regarding claim 17, Stewart/ Chandra discloses wherein the ODS is configured with a cluster-aware relational database management (RDBMS) functionality that is capable of handling periodic queries (See col. 35, lines, 20-21, Chandra et al.), message queueing and store state engine operations (See col. 35, lines 30-48, Chandra et al.), and handling transactions, including insertion, updating and deletion of transactions (See col. 3, lines 40-67, Chandra et al.).

Response to Arguments

7. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marilyn P Nguyen whose telephone number is 571-272-4026.

The examiner can normally be reached on M-F: 8:30 - 5:00.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and 703-746-7240 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.


MN

January 08, 2005


MOHAMMAD ALI
PRIMARY EXAMINER